

DEPARTMENT OF

Retd

THE INTERIO

REPORT OF THE PROCEEDINGS UNIVERSITY OF ALBI

OF THE

SECOND ANNUAL CONVENTION

OF THE

WESTERN CANADA IRRIGATION ASSOCIATION

HELD AT

VERNON, B.C.

ON

AUGUST 10 AND 11, 1908

1741 C2W52 2nd 1908

by Authority of the Hon. FRANK OLIVER, Minister of the Interior

OTTAWA GOVERNMENT PRINTING BUREAU VERNMENT

UNIVERSITY OF ALBERTA

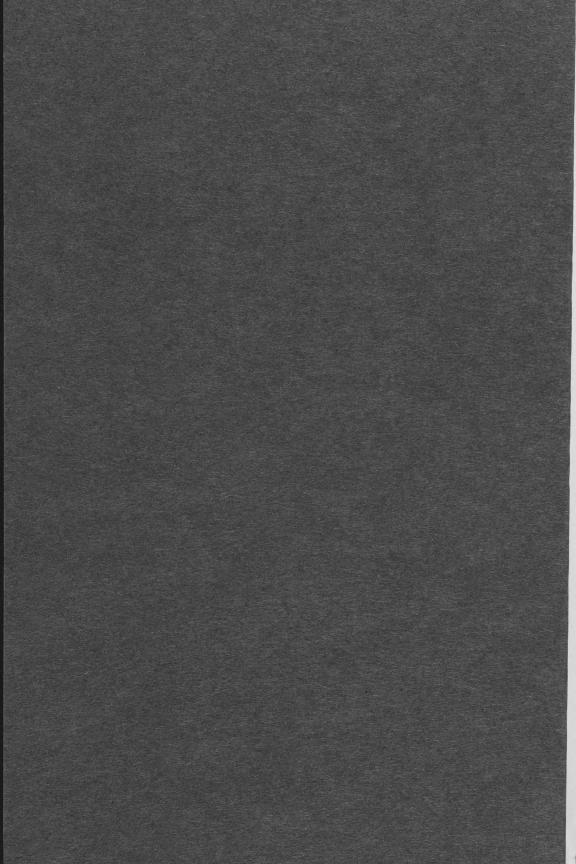
NOV 4 1975

PUBLICATIONS

Ex aibais universitates aibertaensis







DEPARTMENT OF THE INTERIOR

REPORT OF THE PROCEEDINGS

OF THE

SECOND ANNUAL CONVENTION

OF THE

WESTERN CANADA IRRIGATION ASSOCIATION

HELD AT

VERNON, B.C.

ON

AUGUST 10 AND 11, 1908

Published by Authority of the Hon. FRANK OLIVER, Minister of the Interior

OTTAWA
GOVERNMENT PRINTING BUREAU
1909

UNIVERSITY OF ALBERTA LIBRARY

REPORT OF THE PROCEEDINGS OF THE SECOND ANNUAL CONVENTION OF THE WESTERN CANADA IRRIGATION ASSOCIATION, HELD AT VERNON, B.C., AUGUST 10 AND 11, 1908.

(Reprinted from "The News-Advertiser," Vancouver, B.C.)

The second annual convention of the Western Canada Irrigation Association, which was held at Vernon, B.C., on August 10 and 11, 1908, was attended by 104 delegates representing the provinces of British Columbia, Alberta, Saskatchewan and Manitoba. The subject chiefly discussed was that of legislation applied to irrigation. Speeches on this question were made by Mr. J. S. Dennis, of Calgary; Hon. F. J. Fulton, Chief Commissioner of Lands and Works; Mr. Charles Wilson, K.C.; Mr. R. B. Bennett, of Calgary, and Mr. J. M. Robinson, of Summerland. Addresses on other subjects connected with irrigation were delivered by Professor Carpenter, Denver, Col.; Mr. Price Ellison, M.P.P.; Mr. R. H. Campbell, of the Department of Forestry at Ottawa; Mr. Duncan Ross, M.P.; Mr Martin Burrell, of Grand Forks, and others.

A summarized report of the proceedings at the various sessions of the convention is given herewith.

OPENING SESSION.

Vernon, B.C., August 11.—The second annual convention of the Western Canada Irrigation Association, and the first to be held in British Columbia, opened in Vernon on August 10, 1908, at 4.30 p.m. The attendance at the opening meeting was small, a large proportion of the delegates having stopped off at Armstrong, but it was considered necessary that a start should be made.

The chair was taken by Hon. F. J. Fulton, Chief Commissioner of Lands and Works, and President of the Association. On behalf of the Province of British Columbia, he welcomed the visiting delegates, and outlined some of the subjects that would come before the convention. He dwelt on the fact that a commission had been appointed by the Government of British Columbia to investigate this important subject of irrigation. The commission consisted of Professor Carpenter, of Colorado, a noted irrigation expert, and himself. Together they had visited all the portions of the dry belt of this province, and afterwards he (Hon. Mr. Fulton) had taken a trip to Colorado to become acquainted with the system there.

He was sorry to state that the report of Professor Carpenter had not been presented to him in time to permit the Government to take advantage of it in introducing new legislation last session, and it was therefore considered advisable to defer the introduction of any amendment to the Water Clauses Act till next session. This was, perhaps, not unfortunate, as since then he had been able to enlist the services of Mr. J. S. Dennis, the Commissioner of Irrigation for the Canadian Pacific Railway Company in Alberta, who had drafted a series of amendments which he (Mr. Fulton) would embody in a new Act, which would be prepared within a very few weeks. As soon as ready, this Bill would be printed and distributed throughout the province to the various centres where irrigation was being conducted, with a view to having its provisions considered thoroughly by all who were interested in this question.

He also stated that he would invite communications on the subject, whether in the way of endorsing the Act as outlined or offering amendments to it, so that when the bill was presented to the House at the next session it might be as thorough as it would be possible to make it. (Applause.) Mayor Timmins, of Vernon, cordially welcomed the delegates to the city, and expressed his satisfaction at seeing such a representative body of men, not only from British Columbia but also from the provinces to the east. The people of Vernon would do all that was possible to make their visit enjoyable, and he hoped they would avail themselves of the freedom of the city.

Mr. J. S. Dennis responded on behalf of the delegates.

Mr. R. B. Bennett, of Calgary, was elected permanent chairman of the sessions of the convention.

Letters of regret for inability to be present were read from Lieutenant Governor Bulyea, of Alberta; Lieutenant Governor Forget, of Saskatchewan; Lieutenant Governor Dunsmuir, and Premier McBride, of British Columbia; Premier Roblin, of Manitoba, and others.

The following committees were appointed:

Credentials: Messrs. A. E. Ashcroft, J. F. Smith, K. McDonald, W. H. Fairfield, Mayor Bell, of Enderby.

Resolutions: Messrs. Charles Wilson, K.C.; J. S. Dennis, E. M. Carruthers, J. M. Robinson, J. Strutt and W. T. Shatford.

The convention adjourned till 8 o'clock in the evening.

EVENING SESSION.

At the evening session there was about a hundred delegates present, besides visitors from the town and vicinity, the delayed delegation at Armstrong having arrived since the afternoon session.

Mr. R. B. Bennett presided, and in opening called for reports from committees

appointed at the last convention.

Mr. J. S. Dennis reported for the Committee on Irrigation Laws, appointed at the last convention in Calgary, that certain provisions of the Northwest Irrigation Bill, not being satisfactory to the committee, they had sent down a delegation to Ottawa, who had interviewed the Government, and succeeded in having the bill withdrawn for the insertion of the amendments they suggested, and when the bill became law it would include the amendments they desired.

Mr. Charles Wilson, K.C., said that an important resolution from Armstrong, dealing with the preservation of forests in watersheds, had been referred to the Committee on Resolutions, but it was a matter of such importance generally that they would have to give it careful consideration and would report to-morrow.

Other committees were not ready to report.

The chairman said that Mr. J. S. Dennis, Irrigation Commissioner for Alberta, and assistant to the second vice-president of the Canadian Pacific Railway, had to leave on the following day, and by courtesy of those who preceded him on the programme, they would have pleasure in hearing from him that evening.

MR. DENNIS SPEAKS.

Mr. Dennis then took the platform, and after thanking Mr. Ashcroft for allowing him precedence, said the subject with which he wished to deal was that of law relating to the use of water for irrigation purposes. He had at first thought of preparing a set paper on the subject, but had afterwards decided that they would probably like better to hear him speak in a conversational way. The matter of the use of water for irrigation as governed by law in the United States and Canada was an immense subject, and he believed that the books that had been written on it, and the reports covering the findings of the courts, would comfortably fill that room. He would not attempt to do more than give the meeting an idea of certain basal facts in the hope that they might be of some value in British Columbia. He presumed to speak as a layman, because it had been part of his duty for the past fifteen years or more to give close attention and study to this question of law relating to the use of water.

He wished to use as the basis of his remarks the law in relation to this subject in vogue in the provinces east of the mountains where water was used for irrigation, because it was the best law extant on this subject. In corroboration of his opinion, he called attention to the fact that on two occasions at national conventions on irrigation in the United States, where they had perhaps more people qualified to speak with authority on this subject than anywhere else, they had unanimously by resolution confirmed the fact that the law relating to irrigation in Canada was at least two centuries in advance of anything they had in the United States. It was a big admission to come from the United States, where they never liked to admit anything could be better than was found in their own country, but they had had bitter experience in trying to conduct irrigation under varied laws. For years Dr. Elwood Mead, head of the Irrigation Department, and he believed the best irrigation expert they ever had, and who had now been captured by our sister colony, Australia, had tried to get the different states to unite on a uniform code. He had issued a series of bulletins, and among them was one special bulletin dealing with the ideal code. In this bulletin he quoted particularly the Canadian law, and if any one would write to the Department of Agriculture at Washington and ask for Bulletin 86, they would find that he made comparisons with Wyoming and Nebraska, and spoke of the Canadian law as the ideal code he would wish to see the western states adopt.

It was because he (Mr. Dennis) had something to do with getting together the facts on which that law was based that he presumed to come before them and address them on this very important subject. For the past two years he had found it necessary to deal with the laws of British Columbia on this matter, and by request of the Chief Commissioner of Lands and Works had assisted him in preparing the draft bill of which he had spoken that afternoon.

GOOD EXAMPLE TO FOLLOW.

In giving in a conversational way his ideas of what he should like to see done in British Columbia, he would like to mention one fact in connection with the law in operation east of the mountains; that was that though it had been in operation for over fifteen years, and they had under it a great deal of irrigation development, including some small schemes and some large ones such as that of the Canadian Pacific Railway, which involved an expenditure of over a million dollars, they had yet to have their first dispute in the courts in connection with that law. (Applause.) That was the best proof that the law was as it should be.

"In starting to express my ideas on what your amendments to the irrigation laws in this province should be, I want to reaffirm the statement I made a few moments ago, that the ultimate success of irrigation is dependent on the law relating to the use of water. After all, the value in this valley or any other place where the conditions are the same is not in the land—it is in the water. Because in every country where irrigation is required there is considerably more land for irrigation than there is water to irrigate it. In that respect, British Columbia as a mountain country is most favourably situated, and yet if you utilized all the water that there is and distributed it most economically you could not irrigate half the land available for irrigation. With all the irrigation systems in the United States, and with the greatest possible conservation of water by the storage reservoirs now being constructed, they could not irrigate more than eighteen per cent of the land available. In British Columbia you might hope to irrigate from twenty-five to thirty per cent of the available area, and unless you provide so that the water can be used with the least amount of litigation you are only laying a hampering brake on your future progress."

Mr. Dennis went on to point out that in the States to the south more money had been spent on litigation than on irrigation development. He did not wish to be an alarmist, but he did wish to make the statement that unless, and now, in this province, the whole subject was given careful consideration, followed by the enactment

of a clear cut and comprehensive law, they would have a repetition of those troubles in which the United States have put neighbour against neighbour and state against state, unless certain things were done, and in his opinion he would state what he thought should be done.

MINER'S INCH USELESS.

East of the mountains they had got rid of these difficulties, and he asked to be allowed to deal with the subject in British Columbia, because the convention was being held there, and the question was a very live one in the province. The law at present as contained in the Water Clauses Consolidation Act was the outcome of certain conditions. First regulations for the use of water were the outcome of the necessity for its utilization for mining purposes. The miners required to divert water from the streams, and in the absence of law enacted their own rules, just as they did in regard to the size of claims and the methods of working them. When the time came this was followed by certain legislation on the basis of these regulations. Right there was a false basis of measurement to begin with. The miner's inch as a measure was useless to measure water for irrigation purposes. This had been found in the United States, where in one state it meant one thing and in another state it meant another thing. It was a measure for local conditions only, and was not a measure that would permit of uniformity or was available for irrigation. In irrigation they should use rather the cubic foot per second, or in large areas allow so many cubic feet to the acre. That was a measure that was practical and concise.

Fortunately in British Columbia they had got rid of one great stumbling block in American legislation, by inserting in the Water Clauses Act of 1896 a provision vesting the control of all water in the Provincial Government that was not needed for domestic purposes. One difficulty to be faced by the Federal Government of the United States at present, when it was constructing eighteen reclamation schemes at a cost of between \$70,000,000 and \$80,000,000, was that while the Federal Government owned the land they were going to reclaim, they had to go to each individual state to get the water. As a consequence they would have to go into the state courts to secure a settlement. All this because they had neglected to lay the foundation, and this foundation was in the suppression of any common law of riparian ownership by individuals. In the east, they had started on the assumption that the land was the property of the Crown and the Federal Government should control it. They had that principle in British Columbia, but it did not go far enough, because having confirmed the principle that the water like the land belongs to the province, while you could get a clear title to the land, they never did anything to perfect the title to the water. If, then, the value was not in the land, but in the water, the thing was hind-before.

DRASTIC REMEDY REQUIRED.

"If I have succeeded in making clear to you what is the matter, I would ask you to bear with me while I suggest the remedy. Your law has been amended from time to time, and at the last session of the Legislature the Chief Commissioner of Lands and Works brought in an amendment that was most important. The trouble with the law to-day is that it is cumbersome and hard to understand, and does not give the individual or the company a clear title to the water. The remedy naturally must be drastic. Just how drastic it can be will depend entirely on the support that you gentlemen interested give to the Chief Commissioner of Lands and Works and the Government when they bring in the promised legislation. I may say that listening to the Chief Commissioner this afternoon, I think he deserves credit for taking an unusual course in dealing with this legislation. He said his object was to have the Act printed and sent out to those interested, so they could study it and make suggestions for its improvement. That seems unusual, but it was the course followed by the Dominion Government in the law I have referred to. Its results have shown that it

was a magnificent move, and when that Act comes before you, you will not be doing your duty if you do not give Mr. Fulton every possible aid in drafting the Act in the way that will best meet conditions, and in giving him every support in its enforce-

ment when it is passed. (Applause.)

"I am not well acquainted with conditions in this district, but I do know that in southern British Columbia there is practically no stream required for irrigation development that is not already over-recorded. I know of streams used for irrigation that have records against them of 2,000 miner's inches, and these streams at high flood never carried a hundred. That being the case, you can well understand what will happen when the people of this province, and the thousands that will come here within the next few years, get busy on irrigation. You can well understand that my fear about the litigation that is going to take place is well founded. If the present conditions continue it is inevitable, and, as a consequence, I come to a second basal principle.

"The law that you will be asked to consider must provide for the most drastic house-cleaning you can imagine. I don't see how it is possible for the Government to bring in any legislation dealing with this subject that does not provide for cleaning house. The provisions of your law require the posting of notices of application. That is the present procedure, and it is followed by methods by which men have recorded water notices all over the provinces by placing them on a tree or log and have been given a thousand inches of water out of a stream that has not fifty in it."

REMEDY SUGGESTED.

Mr. Dennis then went on to point out the remedy. The Government would have to appoint a commission, not necessarily a large, possibly a small one, but it must consist of men who know their business, experts who can gauge the water from an engineering standpoint, and who can discuss it from a legal standpoint. "They will have to go to work and consider the records granted on every stream in the province, and when this house-cleaning process takes place those who have records they are not using will have to go out of existence, and make room for those who will use the water. (Applause.)

"That is a drastic feature, and it is gratifying to know that there are some who will take up this suggestion. You have to have forfeiture for the non-user. Such a thing as staking a record on a stream, and then sitting down, say, for four or five years, in the hope that some one will come along and buy the land and pay you to put

in an irrigation scheme for him, will no longer exist."

He continued that such a law as he spoke of must provide that when a stream will only supply a certain quantity of water it must not be called upon to supply more. It should also be made impossible for a man to put in a ditch on land and sell it as irrigable when he knew there was not enough water for irrigation purposes.

Such a commission as he suggested would have to go into all details, and discover what a stream carried at high water, low water and flood. Having collected this information they would have to notify every man, or his heirs, as to how much he was entitled to in proportion. This should be done with as little law and as few lawyers as possible, and they should grant the records to the men they found on the ground, while the records they were not using should be snuffed out of existence. In other words, they should take a debit and credit account of every stream. They would always find more debits than credits, and it would be the work of the commission to make them balance. He suggested that records should be taken in the order in which they were recorded, and those held speculatively should be snuffed out instantly. Where claims were about equal, a rate would have to be fixed, and in this way a balance might be arrived at.

The next question they would have to deal with, was the question of the duty of water. This had caused a great deal of heart-burning in the States. In Alberta they had got rid of it by the Government definitely fixing what the duty was to be. The

duty would have to be fixed, and then the commission could determine the amount of water to be allowed to that duty. Such a measure as he proposed must provide a clear cut system as to how water records could be obtained. They should put something in force to prevent the necessity for cleaning house again, and to do that the present provisions of the law would have to be very materially departed from. Three purposes for the use of water would have to be dealt with in any irrigation law. These were the use of water for irrigation, power and mining purposes. The use of water for domestic purposes would have to be dealt with in general law. Instead of publishing his application by sticking a notice on a tree, the applicant would file his application to the government official in writing, and if his suggestion was carried out it would be necessary for the Chief Commissioner of Lands and Works to appoint officials in different portions of the province to whom these applications could be made on proper forms, in which the applicant would have to describe in detail for what purpose he wanted the water and to name the stream from which it was to be taken so that it could easily be identified. He would also have to inclose plans to show from which point he wished to take the water, and by what channel he would divert it for his own use. If his application was good, and there was a credit side of water in the Government books which he could use, he would be told to go ahead and publish his notices for a certain time in the newspapers, so that any person having an objection would be given an opportunity to make it. When he was given a license, it would be on the understanding that he had to begin and finish his work within certain dates according to the nature of the scheme. It would be subject to inspection at any time, and he must submit to the directions of the inspector. When the scheme was completed he could get a definite license.

"But here is the vital point," said Mr. Dennis, "the difference between your law and our law is, that with us he gets a record which he carries in his pocket, and can produce as evidence of his ownership at any time, as much as if I said 'I have \$5,' and produced the bill. There should be no necessity for going into court to prove a record. Under the existing law in this province you produce some evidence of a record and go into court to prove it. The difference I have mentioned can be brought

about by following the drastic methods I have suggested.

CONSERVATION OF SUPPLY.

"There is one other point I wish to speak about as of great importance to British Columbia. Like all mountainous countries it is blessed with a plentiful supply of water for irrigation, and like other mountainous countries its streams are subject to rapid fluctuation. On certain mountains the snowfall is heavy, and conditions may bring a rapid run off and floods follow. In that connection a matter of vital importance for the preservation of the run off is the conservation of timber. However, what I wish to point out is that you have these conditions of rapid run off, and to meet it you have to deal with the subject of the storage of water in reservoirs in a much more marked way than in other countries."

Mr. Dennis continued, that having outlined the law in relation to water records they would have to extend that law in relation to water storage. It would often be necessary to construct large reservoirs at great expense, and having stored the water it would be of very little use unless they could get it out. A man who stored water should have the right to carry his water down the channel with allowance for a certain fixed loss, and conduct it through the headgates of the man who records below him, provided he does not interfere with his supply. It would require years before the Government could say exactly what water should be allowed for loss, but they could fix an approximate figure as a loss of 80 per cent in 20 miles. In that way men would be encouraged to store water till such time as they could make use of it.

Mr. Dennis continued that he had been accused of optimism, and confessed that he was not yet cured of it. This had been his first visit to Okanagan valley, and he believed that this southern portion of British Columbia under a well considered irrigation law which would do away with hampering litigation, would become in a comparatively few years an horticultural section that would have a world-wide reputation. It had the climate, it had the soil, it had the water supply, and last but not least, it had across the mountains a market that could absorb all that it could possibly

produce. (Applause.)

"Therefore, I venture to say that what is most needed in putting that business on a proper basis is a clear cut law dealing with irrigation. I hope that such a law will be brought in and passed, and that you will give the Chief Commissioner of Lands and Works and the Government loyal support in enforcing it. I am quite satisfied that the little temporary inconveniences and hurts that must come from such a law will in a short time pass away, and the work done by this convention in dealing with the question and assisting the Government to provide a law that will meet the situation is very important indeed. The work done here will last for all time, and will have a more marked effect in aiding irrigation development in British Columbia than anything else you can undertake." (Loud and prolonged applause.)

LICENSE PERPETUAL.

Mr. J. Brown (Kelowna) asked Mr. Dennis' opinion as to the life of the license for water under the system he proposed. He also asked if it would give a man a

right to take water from a spring rising on another man's land.

Mr. Dennis said the license would be perpetual, and subject to cancellation only on the one provision against the non-user. As long as the water was being used, the license holder might sell his perpetual right like anything else. Of course, there would have to be a provision that the license would not elapse for non-use in wet seasons. In regard to the use of a spring on another man's land, certainly if he had a spring from which he was using only two barrels a day for watering stock and domestic use, while ten barrels were flowing away as waste, a neighbour would have a right to take that and use it for irrigation purposes. It would enrich his land and enhance the value of the neighbour's land, and no harm would be done to any one.

Mr. J. M. Robinson (Summerland) wished to know whether Mr. Dennis thought that the State would have discharged its duty in providing regulations for the water. Should it take no definite steps in utilizing the water supply as the Federal Government had done in the United States? So far as the present regulations went he had been up against irrigation for the past ten years and had not found them difficult. He had always understood that in the Water Clauses Act they had the best digest of water laws up-to-date. They had not had any law suits in British Columbia, but was the Government going to stop with passing resolutions? "I had an idea that the Government was going to do something. If anything is to be accomplished in this dry belt either some tremendously wealthy corporation must take hold of the irrigation business or the Government must. Let them get up and do something."

GOVERNMENT IRRIGATION UNSUCCESSFUL.

Mr. Dennis said he thought that the amendment of the law would be sufficient at present. Mr. Robinson might have got along without trouble so far, but it would come. One attempt at Government irrigation by a State that he would cite was known as the Carey law, framed by Senator Carey, which was passed on this basis: The Federal Government of the United States owned the land and said to the States, "If you will undertake to develop certain areas by the construction of irrigation systems, we will give you a million acres of land." The offer was accepted by several states. It was the first attempt to build an irrigation system by Government authority, and it failed, except perhaps in the State of Wyoming and, possibly, Colorado. Having failed with the states, the Government ownership men went to the Federal Government, and that resulted in the reorganization of the Reclamation Bureau,

which is now dealing with eighteen irrigation schemes, which will probably cost \$60,000,000 or \$70,000,000 before they get through. That was the history of the Government method of dealing with large areas in the United States.

In his opinion, the time had not come in British Columbia or ever would come here or anywhere else in Canada for such schemes. If we had such a law as he stated it would never be necessary. In Alberta in five years they would have more land under irrigation than there was under irrigation in British Columbia. They had vast areas under cultivation already, and there was not a cent of Government money in it, except that the Government undertook to make the general surveys to prove what the water supply was, where it could be stored, and on what areas it could be used. In addition to the Canadian Pacific Railway undertaking, there was the Galt system at Lethbridge now under way, and the survey had also proved that there was a large area to the north which could be irrigated from the Red Deer River, but nothing had been done there yet. In this province we should also require the Government to make the general surveys and fix their sources of supply and the elevations. That done there would be no trouble in getting all the wealth ever required for the development of irrigation projects in British Columbia.

Mr. Brown moved that Mr. Dennis' views be endorsed by the convention.

Mr. A. McLellan (Kelowna) said before that was done he would like as a practical farmer to say something in behalf of the farmers of the valley. Their desire was to have irrigation by Government rather than by corporations. The corporation went into the business to make money out of the farmer. The people needed the water, but if the corporations got hold of it they would make the people pay for it. Mr. Dennis was acting for Canadian Pacific Railway corporations, but he (Mr. McLellan) was speaking for the farmers. If the Government took hold of this work they would get the support of all the farmers in that district.

The chairman explained that the corporations could not charge what they liked. Any rates fixed by the Canadian Pacific Railway for water supply would have to be approved by the Government.

Mr. H. G. Latimer, C.E., seconded Mr. Brown's resolution that the views of Mr. Dennis be endorsed. He said that there was no greater authority on irrigation than Mr. Dennis on this side of the line, and certainly not in the country to the south.

Mr. Charles Wilson, K.C., suggested that a resolution of such importance should be referred to the Committee on Resolutions for careful consideration.

Mr. Duncan Ross, M.P., seconded Mr. Wilson's motion, which was declared carried.

Mr. Kerr (Kelowna) did not agree with Mr. Dennis that the water of British Columbia would only supply about 25 or 30 per cent of the irrigable land. He asked Mr. A. E. Ashcroft, who was in a position to know, if that statement would apply to the Okanagan valley, where he heard that there was enough water to irrigate all the land.

Mr. Ashcroft said the statement would not apply to the Okanagan valley, but it would apply to the province as a whole, which was all that Mr. Dennis had stated.

Mr. Curry (Kamloops) asked Mr. Dennis how he proposed to deal with records which had been made good by the law of 1898.

Mr. Dennis said they would have to be considered by the commission, and where they had certain rights a time would be fixed during which they would be called upon to make them good by actual use of the water. If he would not do that, then he must make way for some one who would. Thus the useless records would be weeded out.

Mr. Woolaston (Kelowna) asked Mr. Dennis how they were to gauge the flow. The biggest creek in Okanagan had fifty records against it. Sometimes it would be practically dry, but in flood it would cover all the records.

Mr. Dennis said the trouble was there were fifty who had a right to take water when there was none to take. The records would have to be dealt with by precedence, and those having the strongest claims would be given the water. The consequence would be that the weaker claims would be compelled to go to the head of the stream and build dams to store water for a time when they needed it.

Mr. Pooley (Kelowna) asked whether under the legislation proposed by Mr. Dennis a person would have the right to switch water from one watershed to another.

Mr. Dennis said yes. Under the law in Alberta they could do that if it was thought to be beneficial.

A delegate asked Mr. Dennis how he proposed to act if a man with a clear title to a thousand acres of land and sufficient water to irrigate it should divide it into 10 or 100 acre blocks and sell it to different parties in that way.

Mr. Dennis said that under his plan the man who bought the land would buy the water rights and irrigation works with it, because he would be the only one to use it, unless the original owner took the Canadian Pacific Railway plan and offered to put the water on the land and charge a certain amount against each acre.

The Chairman said that under the Act in the Northwest there would be an assessment of each man's proportion of the water rights. As the committees had much work to do, he asked for a motion for adjournment.

After passing a vote of thanks to Mr. Dennis the meeting adjourned.

TUESDAY'S SESSION.

Vernon, August 11.—At the opening of the morning session, the report of the Executive Committee was received. The Chairman thought the Executive should have made some mention of the aid granted to the convention by the Dominion and Provincial Governments.

Mr. Ashcroft said they had omitted that, and he was only too glad to mention that the Provincial Government had granted \$2,000; they had also a guarantee of \$1,000 from the Vernon district, and the city had given \$500.

The Chairman said they were indebted to the Dominion Government for print-

ing the reports of the last meeting at Calgary.

Mr. Charles Wilson, K.C., Chairman of the Committee on Resolutions, handed in a resolution dealing with the conservation of water by the preservation of timber. He said the original motion from which it had been drafted had been sent from Armstrong, the municipality there desiring the preservation of the timber around its head of water supply which lay beyond the municipal boundaries. As there were so many similar instances, the committee had decided to make its application general rather than have it refer to Armstrong particularly, but no discourtesy was intended to the people of that district. Another motion dealing with the taking of water from one district to another had been considered by the committee, but unfortunately they did not think it would be wise to bring it before the convention.

PRESERVATION OF TIMBER.

The resolution brought forward was read by the Chairman as follows:-

"Whereas the preservation of the forests at the watershed of all streams in the province, the waters whereof are available for irrigation or industrial purposes, is of vital importance for the prevention of floods in spring and drought in summer; and

"Whereas, at the first meeting of this convention held at Calgary on the 17th and 18th of July last year, a resolution somewhat similar to this was passed praying the Dominion and Provincial Governments to take steps to protect the existing forests on watersheds; and

"Whereas, the matter has not yet received that attention that, in the opinion of this committee, its importance demands; "Therefore, be it resolved that the Dominion and Provincial Governments be again urged to take active and immediate steps to protect existing forests on the watersheds of all streams available, or that in the future are likely to become available, for domestic, agricultural or industrial purposes, and to replant denuded areas at the heads of streams, so that the sources of the supply of water for all such purposes may be maintained forever.

"And further, that better means be adopted for the prevention of forest fires on the watersheds, and it is suggested that the penalty in the Bush Fire Act shall be increased, and that one-half of any such penalty shall go to any person furnishing

evidence resulting in a conviction."

Mr. Carruthers (Kelowna) moved and Mr. Wolfenden (Armstrong) seconded the endorsation of the resolution.

Mr. Carruthers said that among people who had any experience in irrigation it was hardly necessary to point out the necessity for the preservation of timber for the protection of watersheds. Dealing with the proposal to increase the punishment for offenders under the Bush Fire Act who started forest fires, he thought an increase of the fine of, say, from \$50 to \$500 was unnecessary, but when it was proposed to give half the fine to the informer he thought there was some justification for it. A man would often be compelled to leave his work and have his horses lying idle in order to give information, while the importance of keeping a careful watch on forest fires was illustrated by the disastrous fire at Fernie.

Mr. Ashcroft proposed that before they proceeded further they should hear from Mr. R. H. Campbell, of the Dominion Department of Forestry, who was with them.

ADDRESS BY MR. R. H. CAMPBELL.

Mr. Campbell expressed his pleasure on visiting a district the fame of which had gone so far abroad. He was interested in such a convention as this, not only from the forestry point of view but also because the administration of the Irrigation Act came under that branch of the Department of the Interior under his charge, and it was fitting because forestry and irrigation were matters essential to one another. If water supply was to be kept at its best the forests on the watersheds must be protected. As a rule forest lands were of little use for agriculture, so that there was no conflict between forestry and agriculture; rather they were allies. At least the forest

on the watersheds and highlands and rocky hillsides should be preserved.

They had considered the effect of forestration on precipitation, both rainfall and snowfall. This subject had been considered carefully in Germany and France. In France, they had come to the conclusion that the forests had considerable effect on precipitation, and the Germans had made experiments and reached no definite conclusion, though on the whole their reports were rather against the belief that the forests had much effect on precipitation. But there was no doubt they must have a certain effect. There must be a coolness in the forest that must have an effect on the atmosphere, while a dry, rocky hillside, heated by the sun, could not have the effect on rainfall that the forests had. There was no doubt that the forests had a great effect on the flow of water in the streams, since they held the snow later in the season, and if the watershed were well forested the floods in spring would be decreased. Then there was the mechanical effect by the retardation of the flow by the humus and roots in the soil. A bush fire by destroying the humus on the hillside might do more harm than a century could repair.

In British Columbia, in Saskatchewan and Alberta they had forests useless for any other purpose than for forming watersheds. These water supplies were all the time becoming more useful for power purposes with the advance in the use of electricity, and they were also essential for civic purposes. The resolution asked the Government to do more than they had done in the past in protecting the forests from fire, and he would outline what the Dominion Government had already done in that respect. In a country like Canada, with large areas of forest and a population as yet

very scattered, there was no possibility of keeping a small army of men to protect the forests as was done in older countries. They had adopted the best system they could at present in patrolling the forests by the appointment of rangers and wardens. A forest expert from Germany would be lost in Canada, and we could not attempt to follow their methods of cutting fire lanes and keeping the forest floor clear of debris. The best system was the patrol system, and they had been developing it as much as possible. A large number of rangers had been appointed in the Dominion belt in British Columbia, and while they had not been able to prevent all fires, they had had no fire of any serious proportions in that belt, as they had been able to catch them in their inception and prevent them from spreading. But for that the whole belt would be in the same position as when the Canadian Pacific Railway first came in, that was, charred and blackened and practically denuded of its timber, but now they could begin to notice the hillsides being clothed with the green forests.

THE CAMPAIGN AGAINST FIRE.

No system could absolutely prevent fires, as it was impossible to watch every camper and compel him to put out his fire after making a cup of tea, and the patrol system did not pretend that it could do anything of the kind. They did not confine their efforts to the patrol system alone, but tried to educate the people in the matter of fire fighting by posting notices in various places, and trying to make people understand the forestry laws. Conventions like this could do much, and the newspapers could do still more to help them in this work. Indeed the newspapers had always shown a willingness to assist when called upon.

This one matter of forest fires made it difficult to have an advanced policy in forestry. There was no reason why the forest resources of the country should not be used so long as it was done in a proper and methodical way, and his department was going ahead and trying to do it. They had several experts in forestry on their staff, and they meant to develop it as rapidly as they could.

In British Columbia they had set apart a number of forest reserves in the railway belt, particularly in the dry district. He visited one of these reserves a few days ago, and was much impressed with it. The headwaters of streams in the dry belt were located in these reserves, and their preservation was very essential. They wanted to go further and make a thorough examination to find out what timber was on them, and get an idea of the topography so that they could make rules for using the timber without injuring the water supply. In these reserves there was not only timber, but there were sites for reservoirs, and he saw no reason why the reserves should not be used in the manner that would be of most benefit to those using the hills for irrigation purposes. In Alberta, on the eastern slope of the mountains, they had men ranging for the purposes of seeing how irrigation and the forest service would work best together. He hoped that the men in the forests would be making observations at the same time as the irrigation service were making observations below, and thus in time they would be able to get accurate information as to the effect of the forest on the flow of the streams. There, as here, they were subject to sudden floods and fluctuations, and they might be able to preserve the supply to some extent by building reservoirs or maintaining forests around the source of supply.

PLANTING OF TREES.

The Chairman suggested that Mr. Campbell might mention something about the work of tree planting in which his department was engaged.

Mr. Campbell said this was work that had been developing rapidly in the prairie country. Where there were large stretches of land with practically no trees it was essential that they should be planted for the protection of cattle and buildings. Wood was also essential for fuel purposes, and in time to come it might be useful

for construction also. The Dominion Government felt that it would be its duty to provide some forest shelter. The local nurseries could not supply the trees. Their stocks were not large enough, and the prices so high that it would be impossible for the average farmer to buy them, so the Dominion Government went into the nursery business itself. They had a large one in Saskatchewan, and during the past few years had sent out about two million trees to farmers in the prairie provinces. The person wanting them had to make an application in proper form and to show that he had land in a proper state of cultivation to plant the trees. Then an inspector was sent out, who gave him advice as to the best kind of trees for his soil. The inspector reported to the department, and if his report were favourable the trees were sent out. The farmer had to sign an agreement that he would plant and cultivate them for at least two years. After that the inspector would make periodical visits to see how the trees were getting on and whether they were receiving proper care. The system had been very successful, and from the latest reports received eighty-five per cent of the trees were growing and doing well.

Mr. T. J. Smith (Vancouver) asked what trees would be most suitable for plant-

ing for shade purposes around houses in the Okanagan valley, for instance.

Mr. Campbell said his knowledge of British Columbia trees was limited. The best way generally was to take native trees first.

Mr. Smith said that it should be made easier for people to get information from the experimental farms on these subjects.

Mr. Duncan Ross, M.P., assured Mr. Smith that all he had to do if he wanted information was to write to Professor Saunders at Ottawa and he would get it.

Mr. J. M. Robinson said that after listening to the address of Mr. Campbell he thought the resolution regarding bush fires must be directed chiefly to the Provincial Government. The Dominion Government had apparently already taken all reasonable steps to carry out the resolution, but what about the Provincial Government? He thought they should move more quickly and survey the watersheds under their control, and find out suitable places for reservoirs and how best to preserve the forests.

ACTION BY THE PROVINCE.

Hon. Mr. Fulton reminded Mr. Robinson that the Government had already placed a reserve on all the forest lands of the province, and there was no need for reserving any particular place. "I think it only right," he said, "that I should notify this convention of what the Government is doing; they are not idle and doing nothing. Only two years ago there was absolutely nothing being done by the Provincial Government in the way of forest protection. Two or three years ago the matter was taken up, and the province is increasing every year its efforts in this direction. At the present time we have in our employ something over thirty paid fire wardens, and sixty or seventy unsalaried wardens, men connected with the lumber industry, who are only too pleased to do what they can to prevent fires. They give information to the paid wardens of any fire, and the wardens have authority to employ all the men necessary to put the fires out. I am pleased to say that no serious fire has occurred with which they could not cope except that terrible disaster at Fernie.

"One important duty of the wardens is to educate the people and make them alive to the danger of fire. In this respect our wardens are carrying out the very same work that the Dominion Government is doing. And I am pleased to say that the people are becoming alive and taking precautions against fire. There are also cases where offenders are brought before the court and fined for starting fires, not so much

for punishment but as a warning to others.

"As to the matters mentioned by Mr. Robinson, it must be remembered that this thing is in its infancy so far as this province is concerned, but the matter is under consideration, and we propose to bring in legislation at the next session dealing with this whole question. We have already, as I said, put a reserve on all forest lands. As far as Government construction of reservoirs is concerned, it is a pretty large

order, and would mean an expenditure of \$1,000,000 or \$2,000,000 at the first clatter out of the box, to use a slang expression, and while the Government is considering it they are not likely to go hurriedly into a scheme of that kind. I would not commit myself nor, I think, would any member of the Government commit himself to such a policy without very careful consideration, and before obtaining all possible information."

Mr. Duncan Ross, M.P., thought it was not necessary to increase the fines to bonus informers about forest fires. He suggested that the resolution should be split in two, and that portion relating to bush fires brought in as a separate resolution afterward.

It was agreed to strike out that portion, and the main resolution carried.

Mr. Carruthers moved, seconded by Mr. Wilson, that the portion relating to fines for bush fires be endorsed. He said that while it was true that the suggestion that an informer should receive half the fine laid one open to the suspicion of malicious dealing among neighbours, yet it must be remembered that a man who set fire to the bush on his own place did so to the danger of others around. Burning was the cheapest method a man had of clearing his land, but there should be a check on any one resorting to it to the danger of others.

Mr. McLellan (Kelowna) thought that where a fire got away quite accidentally it should be considered in the punishment, but a man who, for example, would set a fire at this time of the year was no man. He was a danger to the community and

should be locked up for all time.

Mr. Wilson said people did not like the word "informer," but it was no shame to be an informer in a case like this, which involved not only the loss of property, but also of human life. He thought the informant should receive part of the fine for his trouble.

Mr. Carson (Vernon) asked if there was not already a provision giving part of the fine to the informer.

Mr. Wilson said he was not sure. Anyhow, if it were the resolution would be superfluous; if not it would be a benefit, and to pass it would do no harm.

The resolution carried.

SUGGESTED LEGISLATION.

Mr. Wilson handed in the following resolution moved by Mr. J. S. Dennis and seconded by Mr. M. E. Carruthers:—

- "Whereas, at the first irrigation convention held at Calgary in July, 1907, attention was directed to the urgent necessisty for the enactment of the necessary amendments to the existing law in British Columbia relating to the use of water for irrigation to overcome the present difficulties in extending irrigation development; and
- "Whereas, this convention notes with pleasure the statement of the Hon. the Chief Commissioner of Lands and Works, that the Government of this province is now giving consideration to the matter of amending the existing law to remove these difficulties;
- "Therefore, be it resolved that in the opinion of this convention the most urgent need of the province to-day is the enactment of a simple and comprehensive law under which the sources of water supply for irrigation may be used to their fullest, extent in extending irrigation development, and to that end the Government in the proposed legislation enact provisions which will clear all streams of existing records that are not being used, provide for the careful and systematic gauging of all sources of supply for the storage of flood water on a basis which will protect those constructing expensive works necessary to conserve this water, and provide the needed staff of competent government officials to administer the law after it is enacted."

POINTS FOR DISCUSSION.

Mr. Charles Wilson said this resolution was one of the most important ever placed before any convention in this province. It was intended to strengthen the hands of the Government in endeavouring to formulate their legislation, but he was not sure that the terms simple and comprehensive would be found to work together when the legislation was introduced. They had listened yesterday to Mr. J. S. Dennis, a gentleman who probably knew more about legislation in connection with irrigation than any other man in Canada. If he ventured to differ from him, it was with a great deal of diffidence, but when a man had an idea that he thought right it was just as well to express it. It would be a poor convention that only heard one person's views, particularly when they had here the Chief Commissioner of Lands and Works, who would be responsible for this legislation when introduced, and who was entitled to the benefit of their opinions. In dealing with the water supply of British Columbia, they would have to recognize that it was available for other purposes besides irrigation. They must consider domestic use, the highest to which water could be put, and water for municipal purposes should be included under that head. It was necessary for human life that they should have water to drink. But the next highest use to which it could be put was for irrigation, for the simple reason that in irrigating land they were preparing to provide the people with food, and food and water were the two essential principles necessary for human life. But having grown the crops you want transportation to take the food where it is needed, so that the third purpose for which water should be applied was for transportation. That was one point in which he differed from Mr. Dennis, because in the Northwest Act this was placed second and put before irrigation. The next most useful purpose of water was for industrial and power purposes, which included nearly every other purpose not mentioned. The last purpose for which it could be used was mining. That might not be received with very good grace in a mining community, and it might seem hard that he, who had lived for years in a mining district, and represented it in the Legislature, should say so, but he knew something about it and it was true. When you use water for hydraulic mining purposes you destroy the surface of the earth and leave nothing but bedrock, and in destroying that you destroy something that might have been useful for untold ages in providing food for human sustenance.

If they followed that out they could deal with the question in a comprehensive way, but they could not deal with it simply and comprehensively. He considered that the idea of Mr. Dennis that a debit and credit account be kept on all streams was one of the best he had ever heard. It would take a few years to learn just what could be obtained from any stream, but when that was known it would be easy to prevent over-recording. The question of how to ascertain the water supply of British Columbia was not easy. The Chief Commissioner spoke of it, but he thought the Minister of Finance would have something to say about it before he got through. Instead of surveying streams all over the country, however, the work might be limited to those localities already fairly well populated in which water was being used for irrigation, such as the Okanagan valley and Thompson river countries.

On the question of storage, he was heartily in accord with Mr. Dennis. On all streams in this province storage was essential, but whether it should be done by private enterprise or by legislation was an open question. For his part he thought it would be better left to private enterprise. He was no great believer in paternalism in matters that could be best decided among the people themselves. If people found it would pay they would spend enormous sums to make lands available for cultivation, and it would be better to leave it to them than ask the Government to spend money collected from all the people of the province in taxes for the benefit of any particular section.

He thought the cancellation of past records one of the most difficult subjects they could possibly have to deal with. He had a great deal of sympathy for the old pioneer who took out a record and did not protect himself as he should have done, and thought the Government should take some pains to perfect them for him. In 1884 there was an amendment made to the Land Act by which existing records were protected to some extent. If these holders were protected to the extent that was intended they would then be unable to start with a clean sheet, and there was another difficulty.

He was not much in love with the Dominion Irrigation Act. He was not so familiar with it as Mr. Dennis, who must naturally love his own child best. For his own part, he confessed that of the two he had a preference for our own Water Clauses Act. It had many merits, but when you attempt to deal with a question of this kind simplicity is at an end. The principles were precisely the same as in the Northwest Act, but the methods of carrying them out were different. Security of title was as good in British Columbia as under the Dominion Act. There was in the Provincial Act every safeguard found in the Dominion Statutes. The only trouble was that in the Water Clauses Act they were hidden away and you did not know where to find them. He had to tackle it once or twice because of cases in which he was engaged, but he confessed that he did not relish the task. The man who drafted the Act had a good idea of what was wanted, but was not a good draftsman and did not express himself clearly. All that it wanted was redrafting and rearranging and they would not then need to have recourse to the simplicity of the Dominion Act.

"I don't think I can say more. I have taken the liberty to differ in some respects from a gentleman entitled to your highest respect, and I believe the best authority on irrigation in the Dominion. But I have had some little experience with water legislation myself. Our Act is not one of the kind to which one would go for the purpose of acquiring information. In that respect it is not as good as the Dominion Act, but when amended and put in shape it will be better for the interests of British Columbia than even the Dominion Irrigation Act." (Applause.)

VALIDITY OF TITLE.

Senator Bostock asked Mr. Wilson how it was that titles under the Water Clauses Act were not indefeasible as under the Dominion Act. He heard that water records under the Water Clauses Act had not been held good in the courts.

Mr. Wilson: "I do not agree with you. I consider the water record as good a title as under the Dominion Act, and it can be defended."

Mr. Ross, M.P.: "What will you do when there are several records against one stream? How will you settle it?"

Mr. Wilson: "I never undertook to settle that." (Laughter.)

Mr. Dennis said he was pleased to hear the ex-Attorney General approve of the resolution as a whole. Last evening he had touched upon the subject in a conversational way, but it was too enormous to be dealt with thoroughly in that way, and there were naturally many points he had not touched upon. He was afraid he had not made it perfectly clear that the views he presented were solely his own. Some people seemed to go away with the idea that he was voicing the sentiments of the Government, but that was not so at all. He agreed with Mr. Wilson as to the uses to which water should be put, and that should be made perfectly clear in any legislation, and the amendments he had suggested were based entirely on those ideas. He quite agreed that irrigation should have second place and mining last. He differed from Mr. Wilson in his view that a water record under the Water Clauses Act was as good as a title under the Dominion Irrigation Act. A man got a water record and had to go to the courts to have it defined or protect himself by injunction. That was not possible under the Irrigation Act in the Northwest. He agreed with the ex-Attorney General that the Water Clauses Act was difficult to understand, and he did not wonder he did not like to tackle it unless he had to. It might contain certain principles, but he must confess that he had gone through it time after time and had been unable to find them. It lacked the one foundation principle, and under it the Provincial Government undertook to give a man something they could not deliver. When every stream in the province was over-recorded, of what use were the records? He repeated his opinion that the time had to come for a house cleaning. Some people who had listened to his address got the idea that he wished to have old records wiped out entirely. That was not so. He simply wished every record to stand on its own bottom. A man who applied for a record 40 or 50 years ago might be far away from a Government office, and conscientiously wish to live up to the law but be unable to do so. His impression was that the Government should take steps to learn whether records were obtained in the proper way. It would be nonsense to say that a man who obtained a record 30 or 40 years ago should be allowed to sit down and say to every one who wanted to use it, "I have the right to the water and you shall not have it." You could not do business like that and have irrigation. In suggesting amendments to the Water Clauses Act, it was not his idea to wipe out that Act, but simply to get a clear and simple title, and to incorporate in it provisions of the Water Clauses Act applicable at the present time, with such provisions added as were necessary to put the business on the basis he had suggested. This was the course they had taken in Wyoming and Oregon, where streams were over-recorded and the difficulty was overcome by such drastic methods as he had suggested.

He confessed that his object in taking up so much of the time of the convention was to place his personal views clearly before them, as he confessed this subject was a hobby with him, and he had been regarded as an irrigation crank. Then he had a personal interest. He was connected officially with the Canadian Pacific Railway, which next to the Dominion and Provincial Governments was most largely interested in the lands of this province, so that he was particularly interested in seeing the law put on its proper basis, and was glad to be given an opportunity of placing his views before them. It might be that the term "simple and comprehensive in the resolution" might not be easy to carry out, but his idea was that the law should be so framed that when a man had any difficulty about his title he should not have to go to a lawyer to have it explained. In Alberta they never had to do that.

There were two things the Chief Commissioner of Lands and Works should take into consideration when introducing legislation such as he had described. One was that he should have a clear understanding that he was going to get the support of the people of the irrigated valleys of British Columbia in passing the Act, and secondly it should be introduced with the avowed intention of enforcing it utterly and absolutely. Unless that was done the introduction of a new law would not clear the

atmosphere.

VESTED INTERESTS.

Mr. Duncan Ross, M.P., said the only water vested in the Crown by the Act of 1896 was the water that had not already been alienated. How about those who had obtained records before that? In a British country, they always recognized a vested right whether granted wisely or unwisely. Some people have records for a hundred inches where they can only use fifty. What were they to do in a case of this kind? It was something they had to face. Would Mr. Dennis compensate these people who had water they would use but were not able to as yet?

Mr. Dennis: "No, sir. I would only give a man title to the water he could use."
Mr. Ross asked whether the same thing would not apply to a man who held a title
to land he was not using.

Mr. Dennis replied that it was different. A man could only use the land himself, and by not using it he did not injure others in the same way as the man who held water he did not use.

Mr. Ross: "Then the Government can repudiate a title once given?"

Mr. Dennis: "No. But in this case I think the Government would be perfectly justified in passing confiscatory or retroactive legislation in regard to the use of water. It has been done in other parts of the continent and it can be done here."

Mr. Wilson: "I think I can set Mr. Ross right. The old system never gave a man a right to a hundred inches of water he could not use. It only gave him a right to as much of a hundred inches of water as he could use."

Mr. Bullman (Vernon) asked how Mr. Dennis would deal with a person who built a dam at the headwaters, and took all the water from the records of the main stream.

Mr. Dennis said the commission would have to adjust such cases. Provided it was only flood water the man who built the dam should be entitled to it.

A delegate asked what would be done if there was no flood water.

Mr. Dennis said the Government could place a gauging rod in the stream duly marked, and water could be recognized as flood, or high or low water, by the measurements upon it.

Mr. Smith (Vancouver) said it hardly seemed fair that if a man had a record for a hundred inches he could not use now, but might in a few years when he had more capital, that it should be taken away from him.

The Chairman said that would have to be fixed by the commission, which would

fix the time in which he must complete his undertaking.

TROUBLES IN POINT.

Mr. Martin Burrell (Grand Forks) said he had a letter in his hand from two gentlemen largely interested in irrigation in this (Okanagan) district. They took the position that they were record holders, but that new settlers were coming in and taking out records where there was not water available. Prior holders had taken the trouble to have water diverted from the mouth of the creek for development purposes, and new settlers had got records above them and depleted their supply. They urged that the Government had received money from the prior record holder and he should be granted what he was entitled to; and further, that no more records should be granted till proper surveys had been made, and the definite amount of water that could be obtained had been settled. Some land required more water than others, and this was a matter to be settled by a commission. They also suggested Government storage, and that no one should be given a record for water he did not use.

"I have listened," said Mr. Burrell, "with much interest to Mr. Dennis, and I am sure we have learned something very valuable, not only to this district but to the whole province of British Columbia. While I agree that prior rights should be preserved, the beneficial use of the water should also be secured. We have also elicited the fact that it is the duty of the Government to undertake those large and necessary works of ascertaining the water supply and gauging and measuring the various streams available for irrigation. I believe in future, after the new legislation is introduced titles will be infinitely ahead of the present titles under the Water Clauses Act, because it follows that records for water will only be given where it can be delivered. We have all agreed on these points, and the value of the discussion has not been in the details. We have heard what we have all been thinking, and an address such as that of Mr. Dennis crystalizes in a vigorous way what is in all men's minds, and it makes it possible to solve these matters in a way satisfactory to the community at large. It is satisfactory, too, that the Hon. Mr. Fulton has agreed on behalf of the Government to consult all people effectually interested, and thus try to secure legislation the most beneficial to all concerned." (Applause.)

Hon. Mr. Fulton said that before the resolution was put he wished to have some-

thing to say, and moved the adjournment till the afternoon session.

AFTERNOON SESSION.

At the opening of the afternoon session on Tuesday, Mr. R. B. Bennett, the Chairman, announced that to allow more time for the discussion of the very important resolution before the meeting, Mr. Asheroft, of Vernon, and Mr. Curry, of Kamloops, had decided to withdraw the papers they had prepared, but they would be printed in the proceedings of the convention, where any one could read them who wished.

Mr. Bennett then stated that it would be necessary for him to leave on the train that afternoon with Mr. Dennis. He therefore asked that they appoint another chair-

man.

Mr. Charles Wilson, K.C., was unanimously elected Chairman for the remaining sessions of the convention. His first act was to call upon Mr. Bennett to address the convention before leaving.

Mr. Bennett expressed the regret he felt at being compelled to leave so early, as he had derived both great pleasure and considerable profit from the discussions. All were agreed as to the desirability and importance of irrigating the arid lands of the country. The only difference of opinion was as to the method to be pursued. For his part he was not in favour of Government ownership of irrigation, because what we wanted in this country was public enterprise on the part of its citizens and the investment of capital. Then, if that investment was made subject to this restriction, that rates shall be controlled by the Government, you have the most effective control that you can exercise. As an instance of how effective such control could be, he mentioned the Railway Commission, which controlled the railways of the Dominion to the general satisfaction of the people. He considered that Government regulation and control rather than ownership was best for the country as a whole. In Government ownership you would have to take the Government funds and the public credit of the whole province for building canals and ditches in a particular section.

"When you have got the Government to make the surveys and exert its control along the lines suggested in the resolution, it seems to me that they have done all that could be expected. If this is kept in mind, I think from the standpoint of British Columbia the discussions at this convention are of far more importance than those we had last year, because after all what affects this valley will affect the whole province, and this province is admitted to be the richest in natural resources in the

whole Dominion." (Applause.)

A hearty vote of thanks was passed by the meeting to Mr. Bennett for his

services as Chairman and for the address he had given.

Mr. Bennett repeated that the pleasure was all on his side. His work was with Mr. Dennis in dealing with matters relating to irrigation, and the discussion had been most profitable to him.

ADVANTAGE OF SUGGESTIONS.

Hon. Mr. Fulton continued the debate of the resolution of Mr. Dennis. He was glad that Mr. Dennis had stated clearly that he was voicing his own views and not speaking for the Government. Mr. Dennis had kindly assisted him in drafting amendments to the Water Clauses Act, but it by no means followed that the suggestions he made were the opinions of the Government or would be followed by them. At the same time, he knew that the sugggestions of Mr. Dennis would be of the utmost value to him, and would make his work simpler and easier, because any one who had experience in drafting legislation would know it was much easier to take suggestions in a concrete form, and mould them to meet the conditions of the country as they existed than it would be to do it without them. He knew he had a difficult task, as would become evident as the convention went on, but it had been simplified by Mr. Dennis' aid.

It was, of course, important that they should have the help of Mr. Dennis, who had given the best years of his life to this subject, but for the past nineteen years he (Mr. Fulton) had given it a certain amount of consideration also. When he first came to Kamloops to practice law in 1889, the first two cases he had were cases over water records. They were very involved, and as a result of his study of the law in those cases he had come to the conclusion that the irrigation question here was one of the greatest importance, and was inadequately dealt with by the legislation on the statute-books.

Mr. Robinson yesterday had made the statement that there had been very little litigation over water records in this province. Well, if that was Mr. Robinson's

opinion he did not know much about that side of the question.

"Ever since those cases I have mentioned." said Hon. Mr. Fulton, "though I live by litigation, in a sense, I have dreaded the advent of a dry summer, because it would give rise to a bad harvest of grain, and a heavy crop of litigation. In my own district there has not been a year in which there has not been one or more lawsuits on this question. They are the most intricate questions that can come before the Legislature or a court. The Chairman can well remember that in the cases I have mentioned, probably on account of the very intricacy of the questions involved, no judgment has yet been delivered."

When he was asked whether it was necessary and advisable to amend the water laws he thought such cases as these were sufficient proof that it was. He found in a great many cases that the root of a title to a water record was involved in obscurity. If you tried to trace out the chain of records you would find a missing link that it was hard to replace. It depended on the memory of some one who knew the circumstances at the time, and these were fast disappearing. The longer it went on the more difficult it became. It was probably because of this haziness of title that streams became over recorded many times. He had investigated one case in that valley last summer, that of Mission Creek, and he found it was over recorded ten times.

NEED FOR LEGISLATION.

In many cases water records had been taken out from a stream not described, and in forty years' time how could any one say for what stream that water record had been taken out? He knew of one instance in which three records had been taken from one stream, each applicant giving it a different name. How was any one to know which was the stream when granting the records? A man had applied for water, not for the quantity he wanted or according to the acreage he wished to supply, but for whatever amount came into his head, and as there was no opposition and the water was not in demand at that time, he usually got it. Some people had even recorded less than they needed, but in the great majority of cases they had recorded very much more. A man, for example, would get a thousand inches of water for 320 acres of land, most of which lay on high benches and could not be irrigated at all. The thing had grown from bad to worse. After the first man had staked his record another settler came in, went along the creek, found land available, applied for his water record, and again there was no opposition and he got it. So it came about that far more was recorded against the streams than was in them.

This condition constituted a very grave cloud on these water records, and now that people were realizing the value of irrigated lands in this province, it was of the utmost importance that they should sift these things and make it possible for the owner of land to show a clear title to the water he wished to use on it. Mr. Wilson and Mr. Dennis differed about the value of these water records, and in a way both were right. Records were only valuable for what they were worth. In the Northwest they had done things more carefully. There, if there was a dispute about water rights, the Water Commissioner would settle it without the applicant going into the courts to establish his claim.

"I am of opinion, and I think every one else here is, that it is necessary to get amendments to our water laws so that we can get the titles in a more stable position than they are at present. If this is conceded, the question arises, what is the best method of dealing with it? I am not in a position to outline the policy of the Government in connection with these amendments. I might touch, however, shortly on some of the suggestions that have been made. Mr. Dennis said we had established the first basic principle of water legislation in 1896, when it was inserted in our Act that all unalienated water was vested in the Crown, that no one should take out water without a record, nor can a riparian owner prevent another person who applies for a right from taking water from a stream. On the question of 'house cleaning,' I agree with Mr. Dennis to a large extent. It is of great importance that our existing water records should be thoroughly investigated, and things established on such a basis that we may start everything with a clean sheet, at least with a debit and credit sheet. That was a good suggestion, and if carried out would enable us to say how any stream in our dry belt should be dealt with."

APPORTIONMENT OF SUPPLY.

He continued, that in Wyoming they had decided to gauge all streams, find what they could supply, and the amount of land they would serve. He did not say the same thing would be done here, but we might follow such a system in this province. If they did, they would have to take it up piecemeal. If they could not take the whole of the Okanagan valley they might take a very considerable portion, and measure the amount of supply in any stream for two or three years, and at the same time surveys could be made of the whole area of irrigable land to be served from that source of supply. Having obtained that information, it could be given to every holder of water records from that source, and a notice inserted in the newspapers calling on all who were interested to ascertain who the holders of records were on any particular stream. Then every holder might be given, say, six months, in which to come before the proper official and establish his claim to a certain priority. When the time was up and all claims in they could be dealt with, and the records reestablished according to priority for such amount of water as the holders could reasonably use on the land they were irrigating. He did not think that any one would advocate that if a man had a record for twice the amount of water he needed he should be allowed to hold it. It could be of no use to him, and under the law he could not sell it. This suggestion appealed strongly to him, and he proposed to give it careful consideration.

He admitted with Mr. Wilson that the present Act is very obscure in its definitions. For example, it prohibits waste of water but there is nothing to define what waste of water is; you have to go to a court to settle it. It becomes a mere matter of opinion, and opinions differ very largely. He remembered when starting in practice in Kamloops a man had sent around a list of questions asking how much water was necessary on an acre of timothy. A farmer near Kamloops replied, "You can't have too much water on timothy." That was an opinion, of course, but it was a sample, and in view of such ideas he agreed with Mr. Dennis that the duty of water should be defined. So many cubic feet to the acre should be allowed for one thing, and so many for another. This would lead to Government control of water, and it would need a competent man to judge how much should be used. If they could get such a man competent and trustworthy, it would be of great benefit to the province.

GOVERNMENT OWNERSHIP.

"In conclusion, I may say that the question of the Government putting in reservoirs or storage systems is too big an undertaking to jump into hurriedly. I have had it in my mind, and have come to the conclusion that if you do it in one

place you must do it in every other section of the province that needs it, or the people who pay the taxes would complain. To attempt it would mean spending out of the treasury of the province or pledging its security for \$4,000,000 or \$5,000,000. And that would be only a beginning, and would be very limited at that. The northern part of the province is beginning to be settled, and there are a great many thousands of acres that will be cultivated, that will be settled upon, and will need a certain amount of irrigation before they can be sure of a crop every year. It is easy to say, 'Why doesn't the Government do something?' It looks easy, but it is really a very serious and difficult question, and should be carefully considered before any steps are taken.

"I am not sure yet that the province has arrived at a condition in which its waste land cannot be brought under cultivation by private enterprise. If that cannot be done I shall very seriously consider the possibility of what the Government can do. Claiming to be a business Government, as we do, we should have to consider whether the returns would justify the expenditure. Under any circumstances you may be assured that the Government will consider carefully the proposals made to it, and

act as appears to them in the best interests of the province." (Applause.)

Mr. D. V. Curry (Kamloops) asked the Chief Commissioner of Lands and Works if he had ever considered the possibility of the municipilization of water

systems.

Hon. Mr. Fulton: "Yes, I have considered it. There is a provision in the Northwest Irrigation Act under which a district may form itself into a municipality for irrigation purposes. I believe it has worked out very successfully not only in the Northwest, but also in some of the States where it has been adopted."

PROFESSOR CARPENTER.

Professor Carpenter, of Colorado, said the question they were discussing was a most difficult one, and he did not envy Mr. Fulton his task in attempting to draft an Act that would meet all conditions. He could not attempt to advocate any particular measure himself, but could merely give their experiences on the other side of the border. The question of over recording streams was one of the worst they had to deal with. "In a community just starting out with very few people, it is easy to make almost any kind of regulations, but after people have acquired rights, you are bound to respect those rights, and it becomes a great difficulty to adjust them to new conditions. If you could start out with a clean sheet it would be easy, but against existing rights it is a hard matter to fight." Some one had spoken of this condition as house cleaning. He would rather liken it to building an addition to the house because the family had been growing. Sometimes it was a most difficult thing to build the new part on the old house and make things fit, but you had your old house and could not throw it away, and must make the best of it.

This trouble of over recording had occurred in Colorado and Utah, and in states where settlement had gone ahead of the process and machinery for recording. People had to go in and use the water whether the machinery was there or not. Thus they had developed rights which had become a vast army, and now they were beginning to fight for the water. The same difficulty had arisen here, and he quoted the Yale district, where there was only one record in 1862, and nine years later there were seventeen records. Some were for twenty, some were for forty years, and the whole thing was tangled up and confused.

There was a difficulty in dealing with a stream because you could not definitely fix the amount of water in it. You cannot put in a stake and say, "Here is low water

and here is flood," because the water is of varying quantity.

The parallel between their conditions and those in Colorado was very striking, and he could not refrain from referring to it. They had worked their way out of similar conditions and British Columbia would do the same. If he were starting out he would have a record with something of a sliding value. For example, more water

was wanted in July than in September, or a man that might want 100 inches in June would only need 25 inches in August. Of course the streams were lower in August and September, and there might be some who needed water then as badly as earlier in the season, and some provision should be made to prevent any serious loss during that portion of the year.

The fault of over recording arose in the States as with them. There people recorded water without knowing how much they wanted, and there was no opposition to it. They took out records and thirty or forty years later woke up and found that they meant something, and what caused the trouble was that these men attempted to sell these rights. For after all the right to water depends upon its use. You have no right to something you do not use, any more than you have a right to the air you breathed or the water you drank last year. Of course it was a difficult situation, because one who had an old right was naturally sensitive about it. He might never use all the water recorded by him, but was afraid a change might lead to its destruction.

Water was most essential to life, and in all ages, even in ancient Italy and in Rome, Cæsar with his aqueducts had his troubles with it, but difficult as it might be they should as an irrigation convention take it up and do all they could to bring it to an issue, and the sooner it was done the better. They should all uphold the hands of the Government in trying to meet these difficulties. How it would have to be done it was hard to say. It seemed to him that here as in Colorado each stream would have to be taken up by itself.

THE STORAGE QUESTION.

Speaking of storage, Professor Carpenter said: "Water that is stored becomes, it seems to me, to a certain extent private property, and it has led to a use corresponding to that of land. It leads to exchange, trading for water in streams and reservoirs, &c., so that in that way its ownership is recognized. I think this province recognizes the importance of this question of storage, and I really think that most of these questions can be settled without a great deal of complication."

Speaking of Government construction, he said in most of the States that matter had been undertaken by private enterprises. The United States Government under the Reclamation Act had done some good work, but it lay in enterprises that private capital could not handle. It had been shown that in nearly every case you had to work the land as well as the water, to make irrigation pay. Water was useless alone, but the irrigated land could be sold at increased prices to recoup the expenditure. Generally these matters were best handled by private capital, though there were cases where the Government might take hold of them to advantage.

"It is hard to come to a definite conclusion on this question, perhaps," he said, but it is well to study it, and any Government that can work out the betterment of the country along these lines should have the gratitude of both yourselves and your successors."

AN IMPORTANT SUBJECT.

Mr. Price Ellison expressed his pleasure at seeing so much interest taken in this question. They were greatly favoured by the presence of such men as Mr. Dennis, Professor Carpenter and the Chairman. The latter gentleman had always taken a keen interest in this subject, and no man in the province had a better knowledge of the legal aspect of the irrigation question than the ex-Attorney General. He (Mr. Ellison) had always taken a strong personal interest in this question. He remembered that in the first speech he had made in the Legislature, he had pointed out that the Government of the day was spending thousands of dollars in dyking land to keep the water off, and he had told them that they could very well afford to spend very much more in putting the water on the land, for the returns would be very much greater.

He thought the Government was going rather too slow in this matter, and the Hon. Mr. Fulton had said that they intended to go slow. Perhaps that was wise, but they were too slow for him in dealing with this important question. For his part he had no hesitation in saying he would like to see the Government take hold of this question. Private capital would only go into it for the profit that could be made, and the consumers had to pay heavily, but the Government could take hold of it for the benefit of the people, and they would find that they would not be losers either. He was aware that the initial cost if undertaken by the Government might be greater than if done by a company, but the cost would be nothing compared with the extra taxes they would derive from that land after the water was put upon it.

GOVERNMENT SHOULD DO IT.

"I do not care if the cost was twice as much," said Mr. Ellison, "it would pay the Government to put it on. People in this convention have asked where Price Ellison stood on this question, and I want you to know where I do stand and have stood all along. Being a unit in the House, it has taken me ten years to convince the Government that something was necessary to be done, and I may say for the Hon. Mr. Fulton that he was always behind me, but now he is in a responsible position and is very careful of what he says and what he does in this matter. I say it is in the interests of this country and every one in it that the Government should take up this matter. A few years ago lands in this district were assessed at \$2 an acre; to-day under irrigation they are assessed at hundreds of dollars an acre, and they stand at that enhanced value not only for to-day but for all time to come. (Applause.) Even if it should cost, as Mr. Fulton says, from four to five million dollars, it would be a mere bagatelle to it, as the Government would hold the lands and assess them for it. Did you ever see a Government fail to collect its taxes? They are the proper people to take hold of it. Twenty years would be enough to pay interest and sinking fund, and the land would be yours and your children's for all time to come."

Mr. Ellison continued, that an assessment of four or five dollars an acre might not seem much, but it would more than compensate the Government for any expenditure they might undertake. For his part, he would send experts, Government engineers, to the source of supply and see what it was. Then he would go below and make survey lines on the levels and benches, and make a calculation for all the land below that line, and would assess it for the interest and sinking fund on the cost of construction. As the Government had it in their own hands it was practicable. They could hold the land under first mortgage till paid for, and this would be a better method than taxation. No one could escape taxes and death.

NOT PRIVATE ENTERPRISE.

Mr. Dennis had pointed out that he thought irrigation should be left to private enterprise. He did not agree with Mr. Dennis, nor did he think with that gentleman that the question would lead to litigation for all time. He agreed with the ex-Attorney General that the Water Clauses Act had much in it to commend it. Hon. Mr. Fulton said he would be willing to listen to suggestions, and they would be glad to give them. He wished to tell him that this was a vital matter to the people of this district. It meant a crop or two crops, where now there was no crop at all. The Government of the United States had spent millions, and it would pay them. Why, should it not pay us? If it paid to reclaim these barren lands let them do so and go into it with all their hearts. There was the land and there was the water. Mr. Shatford had told him that day when he asked if there was any water to spare in Penticton Creek, that there was five times as much running to waste as they could use. He (Mr. Ellison) believed that there was as much water in this district as would cover every acre for agricultural and horicultural purposes. Around Penticton

the Shatfords had made a garden out of a desert, and any man who made two blades of grass grow where one grew before was a public benefactor.

Private companies would only irrigate lands they were interested in, and justly so, but the Government might conserve water for all. He did not agree with Mr. Dennis that they should snuff out vested interests. Men had rights which should be respected. At the same time if the Government put the water on the lands it would be there for all time. If people complained of taxes, they would seek home rule, and try to form themselves into municipalities. This would not deprive the Government of its right to hold the land for interest and sinking fund till it was paid for. The Government was in the best position to undertake such enterprises, because it could borrow money for three per cent, and private capitalists would not invest money in these enterprises as long as they could let it out for eight per cent.

TIME TO ACT.

He thought that if they laid a business proposition like this before the Government, and could show them that they would be well paid for it, they would do something. As Mr. Robinson said, "Let the Government get to work and do something." In improving property they would be increasing taxes. As was well known, the only tax the Government received from municipalities and cities was the personal property tax, and if people made money out of agriculture they would spend it on better homes and surround themselves with the luxuries of life, which would mean more taxation for the Government.

It was well known that every man who came in to the province was worth a thousand dollars to the Government, and those who came with increasing families were worth many thousands. The farmer who came to that valley was worth very much more to the Provincial Government, because he was there for all time, and if he left two would come in his place. However, very few left there who did not come back again, because there was no place in British Columbia where a man could make an easier living, and British Columbia was the best country in the world. It was a land where a man could live in comfort and security under the old flag. At the same time there was no reason why a man should be deprived of water to grow a crop when so much was running to waste.

He believed that most of the companies interested would hand over their works to the Government on terms arranged by a commission. Some would not, perhaps, but arbitration could be arranged for and their claims adjusted. They wanted all their land put under cultivation, because while the arable land in British Columbia was limited, they had in the Okanagan valley the largest area of rich land in the province, which, when irrigated, became of immense value. His friend Mr. J. M. Robinson had been upbraided for selling land at \$100 an acre, but the same land had sold since for hundreds and thousands of dollars an acre.

Hon. Mr. Fulton had told them that four or five millions of dollars was a large sum, but it was not too much to spend for this purpose. This had been one of the dryest seasons he had ever known in Okanagan, and grain crops had failed in some places, but where there was irrigation they had been blessed with abundance, the crops yielding as much as 60 bushels per acre. There were, of course, technicalities to be overcome, such as the title where there had been many records from one stream. He repeated again that if there was plenty of water why should not the Government give it to them. He asked Professor Carpenter why the United States Government was spending \$60,000,000 on irrigation unless they expected to get it back.

Professor Carpenter said that he could not speak for the Government, but some

of the persons who had gone into it expected to be paid back in ten years.

Mr. Ellison: "Well is there any one who would not have water on his land if in ten years he could be relieved of all indebtedness for all time, and the value of the land so enhanced? Think of it. The water belongs to the land, and if you ask what it means to the system, I would say they could not be pleased with anything better. It would be a benefit to the whole community and not a few."

Professor Carpenter said he had spoken of something as private enterprise which Mr. Ellison evidently thought was public enterprise. When he had spoken of paying back in ten years he referred to what was known as company users, who got together and built their dams and paid for the cost out of the increased produce of the land.

Mr. Carson asked what was the increase in value in Government irrigated lands. Professor Carpenter said he knew of no case where the Government had brought land under irrigation as yet, but he had known cases where land had been increased \$80 an acre at a cost of \$30 an acre.

SENTIMENTS OF THE OKANAGAN.

Mr. Kerr (Kelowna) said he was very glad to hear Mr. Ellison speak as he had that afternoon, as he had voiced the sentiments of the Okanagan Valley as no other speaker had. In his district (Kelowna) the people were a unit in favour of Government ownership. Hon. Mr. Fulton had seemed to think it is a question for governments and ministers to consider. He estimated the cost at \$4,000,000 or \$5,000,000. He (Mr. Kerr) did not consider that too great for such an undertaking, when the Government could borrow money at three per cent. There was something, perhaps, in his contention that if it was done in one place it must be done in another, but this did not apply to municipalities formed for irrigation purposes. Indeed, the Chief Commissioner seemed rather to favour such a system. He considered himself that the idea was a very good one, and in order to bring the matter to a head he moved:—

"That this convention urge the Government to pass a law authorizing the establishment of municipalities to own and operate the water supply for irrigation, and it also requests the Government to establish a system of Government irrigation on the credit of the province at as early a date as possible."

The motion was seconded by Mr. Matthews, and thrown open for discussion.

HOW VALUES INCREASE.

Mr. Robinson (Summerland) said he felt disposed to come to the defence of the Water clauses Act. When the Chief Commissioner and ex-Attorney General did not defend it, it might seem rather temerity on the part of a layman to do so. He had been up against this water proposition for the past ten years and experienced all these difficulties he heard about, but had suffered no injury. Six years ago the district of Summerland was a cattle ranch, and could be bought, lock, stock and barrel, for \$100,000. Last year it was formed into a municipality, and assessed by one of their lot owners, who assessed it at \$1,200,000, and that did not take cognizance of improvement, which could easily run up to \$2,000,000. His company had spent \$130,000 on the water system there. There was a trouble before them in the matter of previous records, some of them taken out, apparently, before the Flood. On their main source of supply there was a record of 1,000 inches, but that did not bother them, as the land could not use more than 100 inches, and under the law a man was only entitled to as much as he could use. He agreed that an expenditure of \$4,000,000 or \$5,000,000 would be a big undertaking, but he thought the Government might at least find out how much there was in the stream, and build reservoirs, so that there might be sufficient water for all who held records. In Summerland they were faced by a shortage now, and they were sending men to tap a lake in the mountains to secure a larger supply, and once they got in any one who came in between them would have to pay for it. If the Government would do these things they would not have to, and that was why he wanted to see them do something He was not afraid of governments taking hold of these matters, and would support the amendment

MATTERS FOR MUNICIPALITIES.

Mr. D. V. Curry was of the opinion that municipalities might well take up this matter. If any one, however, said the Water Clauses Act of 1896 was all right they did not know much about it, as it led to all kinds of difficulties, some of which he mentioned. He thought that a creek should be made a common channel like a highway for carrying water down. If a man had conserved water he should have the right to conduct it to his land. As for the Government going into enterprises of this kind, it would only complicate matters. Mr. Robinson spoke of thousands of dollars being made in Summerland; but who had made it? Mr. Robinson and his company. He thought for a Government to spend money in order that private parties might profit was not right.

Mr. Ashcroft (Vernon) moved that Mr. Kerr's amendment be referred to the Committee on Resolutions. He considered that it was too important to be tied as an

amendment to the main resolution of Mr. Dennis.

Mr. Curry said he would like to see the resolution divided. It dealt with the important question of the municipilization of water systems, which many might favour, while they would not favour the portion that urged the Government to build reservoirs.

Mr. Kerr said he would accept the proposal to refer it to the committee, if that were not being used as a means of shelving the question.

It was then referred to committee, and the main resolution of Mr. Dennis carried

unanimously.

The Chairman pointed out that he wished as chairman to be excused from further service on the Resolutions Committee. As Mr. Bennett had also left, it would be necessary to elect two new men on the Resolutions Committee.

A ballot was taken, and Mr. Curry, of Kamloops, and Mr. Ashcroft, of Vernon, were elected to fill the vacancies.

The convention then adjourned till the evening.

EVENING SESSION.

At the opening of the evening session on Tuesday, the Committee on Resolutions presented the following motions, which they recommended should be voted on separately:—

1. That the Provincial Government be asked to pass legislation enabling municipalities to own and operate irrigation systems.

2. That this convention endorse the principle of Government irrigation.

- 3. That the Dominion and Provincial Governments be asked to undertake a system of topographical and hydraulic surveys in British Columbia to ascertain the condition of the watersheds, the amount of water available for irrigation and the extent of irrigable land.
- 4. That the convention strongly recommends the Provincial Government to provide adequate protection to the owners of stored water in conveying the same to their ditch heads.

The Chairman said that before the resolutions were put, as they had already been freely discussed, he would limit speakers strictly to the subject. He also suggested that speakers be limited to ten minutes each.

It was moved by Mr. Hayward, M.P.P., seconded by Mr. Ross, M.P., that speeches

be limited to five minutes. Carried.

Resolution No 1, relating to the creation of water municipalities in British Columbia was not discussed. Mr. Curry moved its endorsation.

Mr. Duncan Ross, M.P., suggested that it should be made quite clear that the Government should only create municipalities at the wish of the people in the districts.

Hon. Mr. Fulton suggested that it be made clear that it applied only to British Columbia and not to Saskatchewan and Alberta.

The motion was amended to meet the suggestions and carried, only one delegate voting "nay."

The second resolution, "This convention endorses the principle of Government irrigation," was read, and Mr. Carson (Vernon) moved and Mr. Speer (Kelowna) seconded its adoption.

Mr. Pooley moved in amendment, "That in the opinion of the convention this is an undue burden to put upon a Government." Afterwards, at the suggestion of the Chairman, he withdrew it, saying he would vote in the negative on the motion instead.

Senator Bostock wished to know what the resolution meant. It was very indefinite. Was the Government simply to own only dams and reservoirs, or the whole system?

Mr. Carson was of opinion that all that was meant was that the Government should construct reservoirs for storage purposes, and people could draw their water from them by laying their own pipes.

Mr. Kerr said he was satisfied to leave the amendment as it was and let the meet-

ing decide on it.

Mr. Speer said he seconded the motion, because the Government had induced him to come here with an offer of a water record which he had never got. He thought when people came expecting water it was the duty of the Government to provide it.

A DIFFICULT PROBLEM.

Hon. Mr. Fulton said he wished to ask some of the speakers where the Government of British Columbia could borrow money at three per cent, as they had said. He would like to know. They had never been able to do that yet. The Grand Trunk Pacific could only borrow money at a rate considerably over three per cent, and at 95 cents on the dollar at that. If the Government could borrow money at three per cent he would like to know where it could be done, as then they might be able to carry into effect the resolution before the meeting.

Mr. Kerr said they might not be able to get it in a time of financial depression like the present, but when that lifted, as it soon would, they might at least be able to borrow money, if not at three per cent, at least at a trifle more than that.

Hon. Mr. Fulton: "I want to know any time within the past fifteen years when the Government of British Columbia could borrow money at three per cent?"

Mr. Kerr said that in times past affairs had been so badly managed as greatly to injure the credit of the province, and since Mr. Fulton and his colleagues had brought it to such a sound financial condition they might be able to borrow money at three per cent or even less. (Laughter.)

Hon. Mr. Fulton said he thought that would hardly enable them to go into the financial market and borrow money at three per cent.

The motion in favour of Government ownership was then voted on, and defeated by 26 to 20.

Resolution No. 3, urging the Government to make surveys of streams and irrigable lands was carried unanimously.

Resolution No. 4, urging the Provincial Government in its proposed legislation to protect owners of stored water in conveying it to their ditch heads was also unanimously carried.

EXPERT GIVES ADDRESS.

The Chairman called on Professor Carpenter to address the convention.

Professor Carpenter said it was a great pleasure to come before the convention again. He had not seen much of this country, but what he had seen last year had opened his eyes. He had been travelling lately in northern Saskatchewan and Alberta, and again his eyes were opened. In his boyhood they always used to think of Canada as a land of perpetual snow, and they regarded the country north of Winnipeg as in the Arctic zone, but if they had experienced the temperature of the Okanagan valley that day and seen peaches growing in the orchards such as they could not grow in the South, they would have begun to think the old Boston divine might be right when he wrote a book to prove that the Garden of Eden was at the North Pole. (Laughter.) As you go north you get into a better country. He questioned whether the people here themselves knew what a great country they had.

It had been a great pleasure for him to be present and hear the debate on irrigation. Like Mr. Dennis, he must confess himself somewhat of a crank on the subject, but the audience must have realized the value of irrigation to the lands in this country. They must have realized that without water their values were small, but with water there was no limit to what they could do. In fact, with irrigation it would be a venturesome act to try to set a value on the possibilities of this country.

For twenty-five years he had been connected with irrigation, and had a chance to see something of its development. Twenty-five years ago men who made prophecies that land would reach certain values that seemed extreme were regarded as visionaries and lost caste, but ten years ago those forecasts had been more than made good. Water on the land had caused it to reach values that no one would have thought of.

There were people who supposed that the water supply would have been depleted years ago, but they had gone on building reservoirs and dams, and there were no more signs of depletion now than then. Conditions were changing, and enterprises which ten or fifteen years ago were not commercially feasible were feasible to-day. It was considered then that any one who wanted to invest money would not consider irrigation, as the enterprise would not be worth the cost. In the meantime, however, land that was only worth \$30 an acre had become worth \$150 an acre, so that it paid to irrigate now where it would not have paid then. An enterprise he had reported against a few years ago, he had reported on favourably this summer, and an enterprise he might report against this year might pay to construct in a few years to come.

While it seemed that we have as much water as before, though more is being used, there has been no real increase. It is only that we are more saving with water now than we have been in the past.

As the value of land increases it pays to save the water, and you build reservoirs and ditches because conditions demand it. When it will pay you to do it, you will do it, but till it does pay you will not, and you would be foolish if you did. You may build a 10-foot dam to-day where you will build a dam of 100 feet in a few years, and you may even go as far as to conduct all the water in pipes.

Development is much the same in different countries. Even in Italy, I was struck by the similarity of their systems to ours. It is true that they have been 600 years arriving at a condition which we have arrived at in a few years, but the stages were the same. I also find this country passing through exactly the same experience that Colorado passed through years ago.

WATER THE PRIME NECESSITY.

In passing through British Columbia they knew the character of country they had here. It would develop as financial conditions changed. They had taken advantage of the streams as they found them, and had quarrelled about the water. They

then found there was not enough water and began to seek means of storing it. For what was the value of land without water? In the States they could grow \$60 an acre of root crops on irrigated land, so that it paid to spend \$20 an acre on irrigation. They had there what they called the bonded system, in which they put in dams and ditches on condition that they could sell their bonds. The prices he had quoted were not in a fruit district such as this, where they had land selling at \$500, \$1,000 or \$1,200 per acre. As conditions developed, the call on the water would be greater, and the greater the value of the water would become, so that it would justify more expense in getting and saving it, and the individual would take pains to see that none was lost, for where a community was economical the individual might be wasteful.

It did not take much irrigated land to make a great country, and he instanced Egypt, of which only a small portion was annually irrigated by the Nile, and yet it maintained a dense population. In fact, it would be impossible to estimate the possibilities of these central valleys of British Columbia when the land became irrigated. There was a complaint sometimes of want of rain, and yet if they had the rain they would not have the bright sunny climate that ripened the fruit. In speaking to Colonel Mann a few years ago, he said that he came from a country where they did not have to irrigate. "I told him he had my sympathy, and told him why. He wanted me to go through the country that his railway runs through. I have lately done so. It is a great country, but it does not take the place of the country where you can control the water and have such conditions as you have here.

"You know the conditions in British Columbia better than I do. You have a series of rivers here that every irrigation state might enzy, but they are nearly all in a position in which they are of no use to you. Take the Fraser, the Thompson and the Columbia. They are nearly all low down with high banks, so that they are of no use to you for irrigation. Then your land is scattered about in patches, so that the big ditches of the foothills are also impossible. This brings you down to irrigation by small ditches. The canal system of irrigation would not be possible. It does not seem that you will have any conflict between irrigation and navigation. You have many mountain streams and these are your source of supply. That is what you are using, and your experience will be as in Colorado, where it takes from four to six acres of watershed to supply water for one acre below. Your streams have low heads and are subject to very rapid fluctuations. That bring up the extreme necessity of storage, which you have only begun to discuss here. The logic of events will drive you to consider these things more and more. The whole amount of your irrigable area needs to be dotted with dams and reservoirs.

"It struck me last year that your local mountains were unexplored and there was a lack of information about your watersheds. The mountains are difficult to get through, but you must consider how valuable that water is. If some of your dams could be built on the other side they would be built at once.

PROBLEMS OF IRRIGATION.

"This increase in the value of water is going to have an important effect in many regards. Owing to conditions of gravitation you will have the problem of pumping, with plenty of water at a lower level needed at a higher level. Your problem is that of every other country, to get the greatest value out of the resources you have. Well, at times you will have many problems and difficulties, but they will not be such as to cause any Anglo-Saxon community to hesitate. If we expect to avoid troubles we ought not to be born. Every one who touches water will have troubles, but, fortunately, they come one at a time. In Colorado we have had a great deal of litigation. I like to speak of Colorado. It was a pioneer country with no experience to guide it, and it had to find its own way out. It is very difficult for human beings to adopt a new line of thought, and we were all the time trying to make our irrigation laws conform with riparian laws, and that country spent years in trying to find what

should constitute the rights to irrigate, and it led to litigation. When Mr. Dennis and Mr. Leach visited Colorado in 1902 it was about the end of that period of litigation, and since then there has been very little of it. We have gone through the development you are going through, but you will shorten up the process more than we and other states did. If you could produce to-day a code of laws that would meet all your conditions, in twenty years it would not be adopted. You may be able to fix the main principles of legislation but not all the details.

"It leads to this condition, that as affairs change, you will have to change your code. I have heard criticisms of the code in Colorado, as I heard criticisms of your Water Clauses Act. Yet when these laws were made they met conditions at the time,

and credit is due to those who put them there.

"There are so many things connected with irrigation that naturally only a few can be touched upon in an address like this. I want, however, to emphasize the value of your water. Your efforts will not be confined to this portion of the province. You will have the same problems in the north, in the Peace River valley and other places, though perhaps not for fruit culture, and it behooves your Government and your individuals to take steps to store the water, and bring, with the coming years, all

these valleys under cultivation." (Applause.)

Mr. Bligh, of Calgary, spoke briefly on irrigation in India. In that country, irrigation works were undertaken by the Government on a vast scale. Huge canals were constructed, and were found to yield a good return from the water rates, netting a profit of about five per cent. In the East, the assessment was on the acreage irrigated rather than on the amount of water consumed, and it had been found to work well and economically. The gates were guarded by officials of the Government, and the heads of the canals were ordered to be closed periodically to conserve the supply. It was a system, however, that could not apply to this country, as it needed a scheme of long canals.

ELECTION OF OFFICERS.

Mr. Ashcroft suggested that before the officers were elected, the place of next

meeting should be fixed so that they could choose officers accordingly.

Mr. R. H. Fairfield said by request of the Lethbridge Board of Trade he had been asked to invite them there. They had a large irrigation system to inspect, and a few miles south was the only beet sugar factory in Canada, so they would have some things of interest to show and would make them heartily welcome.

Mr. Hall, of Medicine Hat, seconded the motion that they meet in Lethbridge in

1909, and it carried unanimously.

Election of officers was proceeded with.

Mr. Kerr (Kelowna) moved the nomination of Hon. F. J. Fulton as honorary

president.

Hon. Mr. Fulton said it was customary to elect honorary presidents and the president from the district where the convention was to be held. He thought they should follow that rule now.

Mr. Kerr withdrew his motion, and Mr. Robinson moved the appointment of Lieutenant Governor Bulyea, of Alberta, as honorary president, which carried.

Mr. J. S. Dennis, of Calgary, was elected president.

Hon. F. J. Fulton was elected first vice-president.

Mr. P. L. Naismith, Manager of the Alberta Irrigation Company of Lethbridge, was elected second vice-president.

Mr. Fairfield, Manager of the Dominion Experimental Farm, Lethbridge, was elected secretary-treasurer.

Hr. Hall (Medicine Hat) suggested that the executive board should be selected where a quorum could be got together.

The suggestion was received, and the following board was elected: Messrs. Rowley, Calgary; Hall, Medicine Hat; Bruce, Windermere; Pearcie, Calgary; R. B. Bennett, Calgary; W. C. Ricardo, Vernon; T. W. Sterling, Kelowna.

Votes of thanks to the Press and to the Chairman were passed.

It was resolved that the Dominion Government be petitioned to print the pro-

ceedings of the convention.

Mr. Duncan Ross, M.P., said that just before the House rose he had received a request to ask for \$2,000 for the expenses of the convention. It was too late for the Estimates, but Hon. Mr. Oliver had informed him that day that the Auditor General had authorized him to pay \$200 toward the convention, so there need be no trouble about printing the proceedings.

The convention closed with a vote of thanks and three cheers for the citizens of

Vernon for their hospitable entertainment.

Mayor Timmins asked the delegates to stay over a little longer and they would give them some more tangible hospitality than they had yet had, in a banquet to which they were invited.

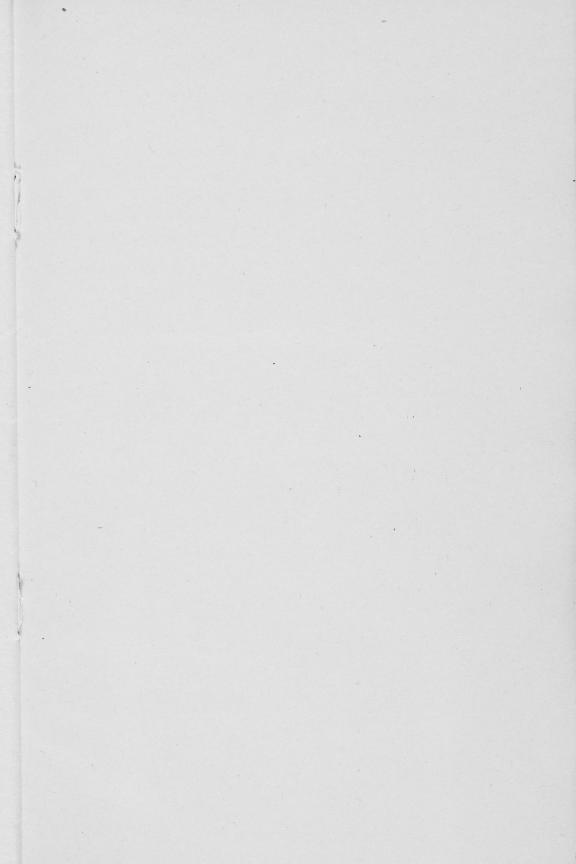
The National Anthem was sung and the convention adjourned sine die.

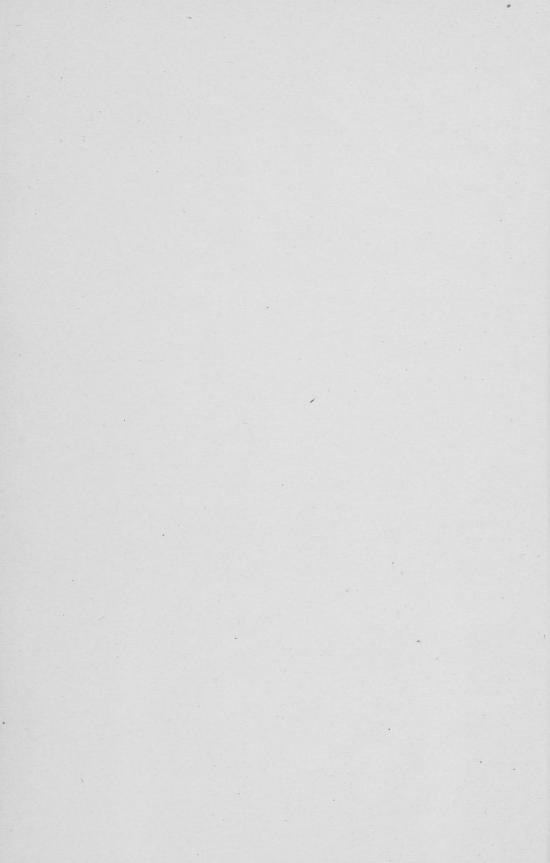
Following is a list of delegates who attended the convention.

DELEGATES.

A. E. Ashcroft, Vernon. R. H. Agur, Summerland. J. S. Arnold, Calgary. R. B. Bennett, Calgary. Thomas Bullman, Kelowna.
O. E. Butler, Regina.
J. R. Brown, Kelowna.
J. T. Bardolph, Vernon.
George Bell, Enderby.
E. E. Billinghurst, Victoria.
F. Billings, Vernon.
Martin Burrell, Grand Forks.
R. R. Bruce, Midway.
Hewitt Bostock, Monte Creek.
Professor Carpenter, Colorado.
C. Costerton, Vernon.
F. D. Curry, Kamloops.
H. S. Cleashy, Coutlee.
E. M. Carruthers, Kelowna.
R. H. Campbell, Ottawa.
T. Clintain, Armstrong. Thomas Bullman, Kelowna. H. Campbell, Ctawa.
T. Clintain, Armstrong.
H. Curtis, Okanagan Landing.
A. S. Carson, Okanagan Landing.
John Calwell, Winnipeg. John Calwell, Winnipeg.
W. J. Cavanagh, Vancouver.
T. J. Cummiskey, Vernon.
A. S. Dawson, Calgary.
A. Davis, Kelowna.
John Dilworth, Kelowna.
H. F. Denison, Vernon.
J. A. Donaldson, Okanagan Landing.
P. Dickson, Vernon.
E. A. Day, Kelowna.
J. S. Dennis, Calgary.
Price Ellison, Vernon.
F. J. Fulton, Victoria.
W. H. Fairfield, Lethbridge.
W. B. Fison, Kamloops. W. H. Fairfield, Lethbridge.
W. B. Fison, Kamloops.
R. Gillespie, Coldstream.
D. Gellatly, Gellatly.
J. U. Gellatly, Gellatly.
P. Godenrath, Vernon.
J. T. Hall, Medicine Hat.
G. A. Henderson, Vernon.
H. J. Hafner, Wilmer.
G. A. Harris, Vernon.
R. H. Hockin, Sifton, Man.
W. H. Hayward, M.P.P., Duncans.
Fr. Ings. Calgary. J. W. Jones, Kelowna.
R. B. Kerr, Kelowna.
G. M. Kerby, Grand Forks.
H. W. Knight, Vernon.

E. Knight, Vernon.
D. G. Low, Keremeos.
H. P. Lee, Vernon. A. Leishman, Vernon.
G. Lawrence, Keremeos.
F. H. Latimer, Penticton. J. L. Logie, Summerland.
D. F. Lloyd, Coldstream.
R. J. Mutrie.
J. T. Mutrie, Vernon.
B. Moore, Lethbridge. A. J. Monckton, Kelowna.
H. H. Matthews, Nicola.
W. Megaw, Vernon.
V. Maddock, Okanagan Centre.
H. E. Maddock, Okanagan Centre.
C. McRae, Vernon.
J. R. McNab, Kamloops.
D. McDougal, Banff.
K. C. McDonald, Vernon.
A. McLennan, Kelowna.
J. A. McKelvie, Vernon.
L. Norris, Vernon.
W. R. Poolem, Kelowna.
R. M. Palmer, Victoria.
R. H. Rogers, Vernon.
D. Ross, M.P., Greenwood.
T. Rankin, Calgary.
W. C. Ricardo, Coldstream.
J. M. Robinson, Summerland.
C. W. Rowley, Calgary.
D. W. Rowland, Asheroft.
John Speer, Kelowna.
T. G. Speer, Kelowna.
R. E. Strathey, Keremeos.
W. T. Shatford, Penticton.
J. F. Smith, Vernon.
S. C. Smith, Vernon.
T. Smith, Nicola.
H. C. Strutt, Kamloops.
S. Tingley, Ashcroft.
J. Tait, Winnipeg.
R. W. Timmins, Vernon.
S. Tolmie, Victoria.
Edgar Trask, Woods' Lake.
James Vallance, Vernon. A. J. Monckton, Kelowna. H. H. Matthews, Nicola. S. Tolmie, Victoria.
Edgar Trask, Woods' Lake.
James Vallance, Vernon.
Charles Wilson, Vancouver.
J. P. Whitelaw, Edmonton.
F. C. Wolfenden, Edmonton.
J. M. Wright, Armstrong.
H. F. Wilmot, Vernon.
E. E. R. Wollaston, Kelowna.







DATE DUE SLIP F. 255

JUN 19 1981

HD 1741 C2 W52 2ND 1908
WESTERN CANADA IRRIGATION
ASSOCIATION
REPORT OF THE PROCEEDINGS

REPORT OF THE PROCEEDINGS OF SERIAL M1 40824172 SCI



HD 1741 C2W52 2nd 1908
Western Canada Irrigation
Association.
Report of the proceedings of SCI

ONE WEEK LOAN

A56128